

Abstract of the Disclosure

A system that includes a synchronized network of three search and track radars and associated processing means and communication channels. The radars are configured to detect and track the target. In response to detected target, an interceptor is launched towards the target. The radars are configured to measure and track the target and the interceptor. The target and interceptor ranges are accurately measured by the radars in the synchronized network, giving rise to synchronized accurate range measurements that are combined by range triangulation to provide accurate target and interceptor position measurements irrespective of the angular measurement accuracy of each radar. The processing means are configured to utilize the measurements to calculate interceptor maneuvers required to overcome errors and bring the interceptor close to a target. The maneuver commands are transmitted to the interceptor using the communication channel. The interceptor is equipped with kill mechanism designed to destroy a target warhead when the interceptor approaches the target.